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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------|------------------|
| 10/605,729 | 10/22/2003 | Adam D. Pratt | SHXP101US | 2728 |
| 24041 | 7590 | 11/10/2005 | EXAMINER | |
| SIMPSON & SIMPSON, PLLC 5555 MAIN STREET WILLIAMSVILLE, NY 14221-5406 | | | MITCHELL, KATHERINE W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3677 | |
| DATE MAILED: 11/10/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/605,729 | PRATT | |
| | Examiner | Art Unit | |
| | Katherine W. Mitchell | 3677 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/26/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6, 9-15 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) 5, 9-11 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 12-15, 18-20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The amendment filed 9/26/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: adhesive forming a strip around said flange as discussed above.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the adhesive layer forming a strip around said flange must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is absolutely no original disclosure in the drawings or specification that the adhesive forms a strip around said flange. All that was originally disclosed or shown was a strip around said outer surface. For examination, examiner assumes that a strip around said flange is formed in that the underside of the flange is annular, and the adhesive formed on the annular surface can be considered a strip in cross-section (as in applicant's Fig 7).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 25, 2-4, 6, 12, 14, 15, 20, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Witten USP 5082405.

Re claim 25: Witten shows a fastener including a threaded insert (spiral thread 58), with an inner surface at 30, an outer surface at 52, a flange at 54, and at least a portion of the flange has adhesive thereon, per col 3 lines 32-65. Note that Fig 8 and col 3 as copied below show that flange 54 would be completely surrounded by adhesive (flange 54 is part of overall

To mount the element 10 in the panel, the opening 48 4. first receives a quantity of epoxy adhesive 50. The element 10 is then inserted through the opening 44A formed in the outer skin 40 so that the epoxy 50 completely fills the opening 48 between the inner skin 44 and the outer skin 46, and surrounds and contacts all 51 external surfaces of the element 10. When the epoxy has hardened, the element is securely mounted within the panel 42 and can then receive threaded members, such as for mounting fire extinguishers, brackets, seat track, and so forth.

unit10) **FIG. 10 is a cross-sectional view of the fastener of FIG. 8.** 51 Note that col 4 lines 12-66 are clear that "10" is an insert (see line 59), it has a thread 58, thus it is a threaded insert by definition. Line 65-66 are clear that the element shown in Fig 10-12 are surrounded by epoxy, noting further that 60 and 62 are notches to better allow the epoxy to "pass the full length of the element" - inherently the flange is covered with epoxy (adhesive). The claim is silent on when the adhesive contacts the flange surface -- it does not have to be pre-applied.

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Note that "56" can alternately be considered the flange, and col 4 lines 26-60 are clear that the notches in 56 allow potting material (epoxy) to pass thru and harden; thus 56 definitely has at least a portion with adhesive thereon.

Re claim 2: As best understood, the adhesive would inherently form a strip around the flange - as it coats the underside of the flange. Note the new matter objections and rejections above.

Re claim 3: The adhesive covers the flange -- applicant is not claiming entirely covers, and the adhesive covers at least the upper surface -- see col 4 lines 33-66.

Re claim 4: The fastener has a substantially circular cross section per Fig 1-6.

Re claim 6: A ridge 20A on the outer surface is shown in Fig 3. Since col 3 lines 48-51 disclose that the adhesive completely coats the entire insert ridge 20A inherently also has adhesive on it. Note that 56 can also be considered a ridge when considering Figs 10-12.

Re claims 12, 14: Epoxy is considered a threadlocking composition as it locks the threads to the substrate.

Re claim 15: Fig 12 best shows the threaded inner surface

Re claim 20: The article with a stud (threaded member) is taught in col 3 lines 51-55 and col 4 line 52-55.

Re claims 23-24: Fig 12 shows open end at 12, and closed end at 14.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witten USP 5082405 in view of Thompson USP 4632944. As discussed above, Witten teaches the claimed invention, but this alternate rejection is provided to show that having the adhesive coated to the fastener prior to use is also known.

Re claims 13 and 22: Witten discloses a threaded insert with an inner surface 30 and outer surface 52 (Fig 12 best shows this) and at least a portion of the outersurface has an adhesive thereon (col 3 lines 45-55). Threads are at 58. See col 4 lines 13-32. However, Witten applied the adhesive to the fastener during the installation process and does not teach specifics of the adhesive. Thompson teaches that adhesive can be applied to engineering parts including fasteners, prior to the installation process of the fastener, in col 1 lines 5-10, and col 5 lines 58-64.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Witten and Thompson before him at the time the invention was made, to modify Witten as taught by Thompson to include applying an adhesive, including an epoxy or methacrylate ester, to the fastener outer surface, in order to obtain a fastener with adhesive pre-applied so that the mess and labor involved in adding adhesive during installation can be avoided. One would have been motivated to make such a combination because ready to install fasteners not needing additional material for proper insertion and adherence would have been obtained, as taught/suggested by Thompson.

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Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used specific adhesives known in the art, including a microencapsulated adhesive, and an epoxy or methacrylate ester since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of matching the selection to the application based on engineering criteria. *In re Leshin*, 125 USPQ 416. Examiner also notes that applicant has admitted in paragraph [0040] of the specification that any adhesive known in the art can be used, including the microencapsulated adhesives.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Witten USP 5082405 in view of Locktite Product 204 Product Description Sheet as cited by applicant, hereafter called Locktite 204. As discussed above, Witten teaches the claimed invention, but this alternate rejection is provided to show that having the adhesive coated to the fastener prior to use is also known.

Re claim 13: Witten discloses a threaded insert with an inner surface 30 and outer surface 52 (Fig 12 best shows this) and at least a portion of the outersurface has an adhesive thereon (col 3 lines 45-55). Threads are at 58. See col 4 lines 13-32. However, Witten applied the adhesive to the fastener during the installation process. Locktite 204 teaches that threadlocking adhesive can be applied to engineering parts including fasteners, prior to the installation process of the fastener, in "Product Description" - it is pre-applied and remains inert on the fastener until the assembly of the threads releases the methacrylate ester {Properties of Uncured material} resin.

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Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Witten and Locktite 204 before him at the time the invention was made, to modify Witten as taught by Locktite 204 to include applying an adhesive, including methacrylate ester, to the fastener outer surface, in order to obtain a fastener with adhesive pre-applied so that the mess and labor involved in adding adhesive during installation can be avoided. One would have been motivated to make such a combination because ready to install fasteners not needing additional material for proper insertion and adherence would have been obtained, as taught/suggested by Thompson.

Further, it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have used specific adhesives known in the art, including a threadlocking agent such as methacrylate ester since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of matching the selection to the application based on engineering criteria. *In re Leshin*, 125 USPQ 416. Locktite 204 specifically teaches that it is designed for use with threaded assemblies, including bolts, screws, nuts, pipe plugs and fittings, and thus there is no inventive step in using Locktite 204 with various threaded assemblies.

6. Claims 18,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witten USP 5082405 in view of Heminger USP 5733083.

As discussed above, Witten teaches the claimed invention, but does not specify that the flange comprises a knurled portion with adhesive. Heminger teaches that

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knurling is used to increase the surface area in contact with the adhesive, and thus improve adhesion to the fastener body, and knurling resists rotation when the fastener is inserted in a hole, in col 7 lines 4-13 and 43-53.

Therefore, it would have been obvious to one of ordinary skill in the art, having the teachings of Witten and Heminger before him at the time the invention was made, to modify Witten as taught by Heminger to include knurling the surface, including the flange, and applying an adhesive, in order to obtain a fastener likely to adhere well to the adhesive layer. One would have been motivated to make such a combination because threads and ridges along the body would serve as "grippers", but the flange would need knurling or other roughening to best ensure that the adhesive would grip the flange.

Response to Arguments

7. Applicant argues the rejection based on admitted prior art. Examiner noted that Dalton was incorporated by reference and admitted as prior art. However, applicant has clarified that he was admitting only that various fasteners and features and adhesives were known, not the combination of fastener with adhesive being claimed. In the interest of expediency, examiner is withdrawing this rejection, noting that certain specific admissions may be used if claims are amended.

8. Applicant argues that Witten does not have at least a portion of a surface of said flange with adhesive thereon. See the rejection above, and note col 3 lines 45-55, and further note that col 4 lines 12-66 are clear that "10" is an insert (see line 59), it has a thread 58, thus it is a threaded insert by definition. Line 65-66 are clear that the

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element shown in Fig 10-12 are surrounded by epoxy, noting further that 60 and 62 are notches to better allow the epoxy to "pass the full length of the element" - inherently the flange is covered with epoxy (adhesive). The claim is silent on when the adhesive contacts the flange surface -- it does not have to be pre-applied.

Note that "56" can alternately be considered the flange, and col 4 lines 26-60 are clear that the notches in 56 allow potting material (epoxy) to pass thru and harden; thus 56 definitely has at least a portion with adhesive thereon.

Since Fig 10-12 show both upper and lower flanges 54 and 56, and it is described as similar in use to Figs 1-9 in col 4 lines 13-23, but having additional collar/notch arrangement. At least some of the flange 54 and 56 would inherently have some adhesive on it - the adhesive "surrounds and contacts all outer surfaces of the element 10, and 54 and 56 are part of element 10.

Applicant assumes that since examiner did not reject non-amended claim 25 over Witten in view of Thompson or Witten in view of Heminger, that claim 25 is thus allowed. Note that examiner rejected claim 25 as a 102 (b) over Witten, thus no secondary reference was applied with Witten.

9. Applicant's arguments with respect to all claims except claim 25 have been considered but are moot in view of the new ground(s) of rejection.

However, examiner notes that applicant appears to be arguing limitations not in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a threaded insert is by definition a blind rivet nut) are not recited in the rejected

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claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Witten calls his fastener an insert and it is clearly threaded.

10. In response to applicant's argument that the fasteners are used in a particular way to obtain a coating, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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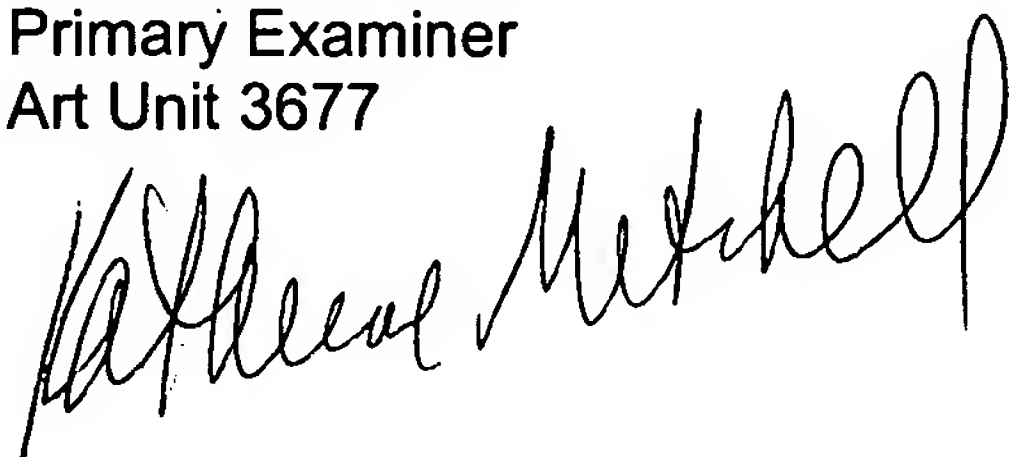
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 571-272-7069. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Primary Examiner
Art Unit 3677



Kwm
11/9/2005